

Europäisches Patentamt  
European Patent Office  
Office européen des brevets



(11) EP 0 977 466 A3

(12) EUROPEAN PATENT APPLICATION

(88) Date of publication A3:  
29.03.2000 Bulletin 2000/13

(51) Int. Cl.<sup>7</sup>: H05B 6/80

(43) Date of publication A2:  
02.02.2000 Bulletin 2000/05

(21) Application number: 99113864.5

(22) Date of filing: 15.07.1999

(84) Designated Contracting States:  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU  
MC NL PT SE  
Designated Extension States:  
AL LT LV MK RO SI

(72) Inventor: Kwan-Ho, Lee  
Changwon, Gyeongnam (KR)

(74) Representative:  
Henkel, Feller, Hänzle  
Möhlstrasse 37  
81675 München (DE)

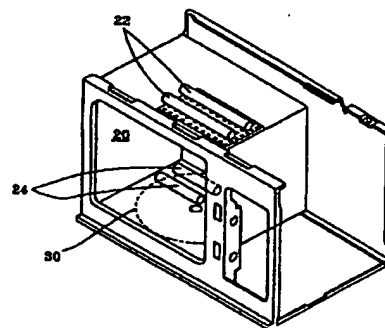
(30) Priority: 29.07.1998 KR 9830648

(71) Applicant: LG ELECTRONICS INC.  
Seoul (KR)

(54) Microwave oven with halogen lamps

(57) A microwave oven with halogen lamps is disclosed. In the microwave oven, two upper halogen lamps are installed on the top wall of a cavity of the microwave oven at a position corresponding to the central portion of a turntable. Two lower halogen lamps are installed on the bottom wall of the cavity so as to be diagonally opposite to the upper lamps and to not overlap with the upper lamps. Therefore, the light, emanating from the upper and lower lamps, is uniformly transmitted to the total area on the turntable. The upper lamps are positioned to overlap with the central portion of the turntable. The lower lamps individually have an output power of lower than that of each upper lamp. The lower lamps are positioned to be radially spaced apart from the central portion of the turntable. The microwave oven of this invention thus uniformly heats and cooks food laid on the turntable while effectively preventing thermal damage of a turntable motor due to heat of the lower lamps.

FIG.2



EP 0 977 466 A3

FC



European Patent  
Office

## EUROPEAN SEARCH REPORT

Application Number  
EP 99 11 3864

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	WO 94 28692 A (QUADLUX INC) 8 December 1994 (1994-12-08) * page 5, line 4 - line 13 * * page 7, line 18 - page 8, line 13; claims 1,2 *	1-4	H05B6/80
A	GB 2 152 790 A (THORN EMI DOMESTIC APPLIANCES) 7 August 1985 (1985-08-07) * page 1, line 24 - line 45; claims 1,2; figure 1 *	1	
A	US 5 378 872 A (JOVANOVIĆ DRAGOMIR) 3 January 1995 (1995-01-03) * column 1, line 59 - column 2, line 5 * * column 2, line 23 - line 40; figures 1,2 *	1-4	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			H05B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 7 February 2000	Examiner Castanheira Nunes, F
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : documents cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 (03.02) (Preliminary)

ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.

EP 99 11 3864

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

07-02-2000

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9428692 A	08-12-1994	AU 682876 B	23-10-1997
		AU 6917794 A	20-12-1994
		CA 2163442 A	08-12-1994
		EP 0699373 A	06-03-1996
		JP 8511084 T	19-11-1996
		US 5954980 A	21-09-1999
GB 2152790 A	07-08-1985	GB 2150681 A, B	03-07-1985
US 5378872 A	03-01-1995	FR 2683299 A	07-05-1993
		AT 128220 T	15-10-1995
		DE 69204963 D	26-10-1995
		DE 69204963 T	15-05-1996
		EP 0540435 A	05-05-1993
		ES 2081078 T	16-02-1996

EPO FORM P4459

For more details about this annex : see Official Journal of the European Patent Office. No. 12/82